

### **ABSTRACT OF THE DISCLOSURE**

A radiation detection method and apparatus thereof for estimating radiation power received by the mobile station. The locations of nearby base stations and the mobile station are  
5 obtained from the broadcast system messages and the location service provided by the service provider, and based on the location information, the radiation power is estimated according to the distances between the base stations and the mobile station. In addition, the radiation estimation process  
10 also utilizes the radiation power of monitored base stations constantly measured by the mobile station for cell selection to determine the effects of interference. Based on a preset safety value and the estimated radiation power, the radiation detection device of the present invention automatically issues an alert  
15 when entering a high radiation environment.